

## Author Index to Volume 176

- Adamowicz, L., NNO-HCl complex. Ab initio calculations with the coupled cluster method and first-order correlation orbitals 176 (1991) 249
- Aguilar Navarro, A., see A. González Ureña 176 (1991) 315
- Albert, I.D.L., P.K. Das and S. Ramasesha, Second-harmonic generation and electronic structure of polymethineimines: a theoretical study 176 (1991) 217
- Almlöf, J., see V. Parasuk 176 (1991) 1
- Almlöf, J., see R. Jurgens 176 (1991) 263
- Amirav, A., see A. Penner 176 (1991) 147
- Anderson, L.R., S. Maruyama and R.E. Smalley, Ethylene chemisorption on levitated silicon cluster ions: evidence for the importance of annealing 176 (1991) 348
- Andino, J.M., see T.J. Wallington 176 (1991) 103
- Aoiz, F.J., see Q.-X. Xu 176 (1991) 499
- Azumi, T., see M. Terazima 176 (1991) 79
- Baer, M., see D. Neuhauser 176 (1991) 546
- Bai, Y.S., see L.R. Narasimhan 176 (1991) 335
- Balasubramanian, K., see K.K. Das 176 (1991) 571
- Bañares, L. and A. González Ureña, Laser-induced crossed-beam charge transfer: energy threshold of the  $\text{Na}(3^2\text{P}_{3/2}) + \text{I}_2 \rightarrow \text{Na}^+ + \text{I}_2^-$  channel 176 (1991) 178
- Bandrauk, A.D. and H. Shen, Improved exponential split operator method for solving the time-dependent Schrödinger equation 176 (1991) 428
- Baran, B.W. and F.D. Medina, Far-infrared spectrum of solid methane: phases III and IV 176 (1991) 509
- Bayense, C.R., see A.P.M. Kentgens 176 (1991) 399
- Bell, A.J., see J. Cuvellier 176 (1991) 325
- Bera, S.Ch., see B.Kr. Manna 176 (1991) 191
- Bergmann, T., see T.P. Martin 176 (1991) 343
- Berkowitz, M.L., see K.A. Motakabbir 176 (1991) 61
- Berlande, J., see J. Cuvellier 176 (1991) 325
- Bernath, P.F., see C.I. Frum 176 (1991) 504
- Bernstein, R.B., see Q.-X. Xu 176 (1991) 499
- Bersohn, R., see A. Penner 176 (1991) 147
- Bierwagen, E., see L.A. Curtiss 176 (1991) 417
- Blake, G.A., see R.E. Bumgarner 176 (1991) 123
- Blom, C.E., see S. Civiš 176 (1991) 489
- Boilot, J.P., see M. Canva 176 (1991) 495
- Boo, B.H., see Y.B. Chung 176 (1991) 453
- Boulon, G., see G. Lifante 176 (1991) 482
- Brum, J.L., see S. Deshmukh 176 (1991) 198
- Brun, A., see M. Canva 176 (1991) 495
- Brunvoll, J., see S.J. Cyvin 176 (1991) 413
- Buckingham, A.D., see P.W. Fowler 176 (1991) 11

## Author Index to Volume 176

- Adamowicz, L., NNO-HCl complex. Ab initio calculations with the coupled cluster method and first-order correlation orbitals 176 (1991) 249
- Aguilar Navarro, A., see A. González Ureña 176 (1991) 315
- Albert, I.D.L., P.K. Das and S. Ramasesha, Second-harmonic generation and electronic structure of polymethineimines: a theoretical study 176 (1991) 217
- Almlöf, J., see V. Parasuk 176 (1991) 1
- Almlöf, J., see R. Jurgens 176 (1991) 263
- Amirav, A., see A. Penner 176 (1991) 147
- Anderson, L.R., S. Maruyama and R.E. Smalley, Ethylene chemisorption on levitated silicon cluster ions: evidence for the importance of annealing 176 (1991) 348
- Andino, J.M., see T.J. Wallington 176 (1991) 103
- Aoiz, F.J., see Q.-X. Xu 176 (1991) 499
- Azumi, T., see M. Terazima 176 (1991) 79
- Baer, M., see D. Neuhauser 176 (1991) 546
- Bai, Y.S., see L.R. Narasimhan 176 (1991) 335
- Balasubramanian, K., see K.K. Das 176 (1991) 571
- Bañares, L. and A. González Ureña, Laser-induced crossed-beam charge transfer: energy threshold of the  $\text{Na}(3^2\text{P}_{3/2}) + \text{I}_2 \rightarrow \text{Na}^+ + \text{I}_2^-$  channel 176 (1991) 178
- Bandrauk, A.D. and H. Shen, Improved exponential split operator method for solving the time-dependent Schrödinger equation 176 (1991) 428
- Baran, B.W. and F.D. Medina, Far-infrared spectrum of solid methane: phases III and IV 176 (1991) 509
- Bayense, C.R., see A.P.M. Kentgens 176 (1991) 399
- Bell, A.J., see J. Cuvellier 176 (1991) 325
- Bera, S.Ch., see B.Kr. Manna 176 (1991) 191
- Bergmann, T., see T.P. Martin 176 (1991) 343
- Berkowitz, M.L., see K.A. Motakabbir 176 (1991) 61
- Berlande, J., see J. Cuvellier 176 (1991) 325
- Bernath, P.F., see C.I. Frum 176 (1991) 504
- Bernstein, R.B., see Q.-X. Xu 176 (1991) 499
- Bersohn, R., see A. Penner 176 (1991) 147
- Bierwagen, E., see L.A. Curtiss 176 (1991) 417
- Blake, G.A., see R.E. Bumgarner 176 (1991) 123
- Blom, C.E., see S. Civiš 176 (1991) 489
- Boilot, J.P., see M. Canva 176 (1991) 495
- Boo, B.H., see Y.B. Chung 176 (1991) 453
- Boulon, G., see G. Lifante 176 (1991) 482
- Brum, J.L., see S. Deshmukh 176 (1991) 198
- Brun, A., see M. Canva 176 (1991) 495
- Brunvoll, J., see S.J. Cyvin 176 (1991) 413
- Buckingham, A.D., see P.W. Fowler 176 (1991) 11

- Bumgarner, R.E., S. Suzuki, P.A. Stockman, P.G. Green and G.A. Blake, Microwave and tunable far-infrared laser spectroscopy of OC-H<sub>2</sub>O: investigation of the water tunneling potential 176 (1991) 123
- Bündgen, P., B. Engels and S.D. Peyerimhoff, An MRD-CI study of low-lying electronic states in CaF 176 (1991) 407
- Bunker, P.R., see M.D. Marshall 176 (1991) 255
- Caldwell, R., see D. Wright 176 (1991) 46
- Canva, M., G. Le Saux, P. Georges, A. Brun, F. Chaput and J.P. Boilot, Time-resolved saturated absorption recovery in malachite green-doped xerogel 176 (1991) 495
- Chan, C.-K., L.X.-Q. Chen, T.J. DiMagno, D.K. Hanson, S.L. Nance, M. Schiffer, J.R. Norris and G.R. Fleming, Initial electron transfer in photosynthetic reaction centers of *Rhodobacter capsulatus* mutants 176 (1991) 366
- Chaput, F., see M. Canva 176 (1991) 495
- Chen, K.H., see C.-Z. Lü 176 (1991) 355
- Chen, L.X.-Q., see C.-K. Chan 176 (1991) 366
- Chernyak, V., see M. Eyal 176 (1991) 531
- Chung, Y.B., D.-J. Jang, D. Kim, M. Lee, H.S. Kim and B.H. Boo, Intramolecular excimer formation dynamics of bis(9-fluorenyl)methane 176 (1991) 453
- Ciccotti, G., see E. Paci 176 (1991) 581
- Civiš, S., H.G. Hedderich and C.E. Blom, The infrared spectrum of magnesium oxide: a diode laser study using the discharge-enhanced reaction between hot magnesium vapor and N<sub>2</sub>O 176 (1991) 489
- Coble, H.D., see B.H. Loo 176 (1991) 514
- Coon, P.A., see P. Gupta 176 (1991) 128
- Curtiss, L.A. and E. Bierwagen, Bonding of a water molecule to a copper atom 176 (1991) 417
- Cussó, F., see G. Lifante 176 (1991) 482
- Cuvellier, J., J.M. Mestdagh, P. Meynadier, P. de Pujo, O. Sublemontier, J.P. Visticot, J. Berlande, A.J. Bell and J.G. Frey, The collision of electronically excited Ba(6s6p<sup>1</sup>P<sub>1</sub>) with CO<sub>2</sub> and H<sub>2</sub>O clusters 176 (1991) 325
- Cyvin, S.J. and J. Brunvoll, Series of benzenoid hydrocarbons with a constant number of isomers 176 (1991) 413
- Dan, P., see H.T. Liou 176 (1991) 109
- Das, K.K. and K. Balasubramanian, Electron affinities of Ag<sub>4</sub> and Au<sub>4</sub> 176 (1991) 571
- Das, P.K., see I.D.L. Albert 176 (1991) 217
- De Haan, J.W., see A.P.M. Kentgens 176 (1991) 399
- DeLeeuw, B., see V. Parasuk 176 (1991) 1
- Deliwala, S., see C.-Z. Lü 176 (1991) 355
- Demtröder, W., see U. Diemer 176 (1991) 135
- De Pujo, P., see J. Cuvellier 176 (1991) 325
- Deshmukh, S., J.L. Brum and B. Koplitz, Photolysis of iodoethane: atomic hydrogen generation 176 (1991) 198
- Dias, J.R., Enumeration of benzenoid series having a constant number of isomers 176 (1991) 559
- Diemer, U. and W. Demtröder, Infrared atomic Cs laser based on optical pumping of Cs<sub>2</sub> molecules 176 (1991) 135
- Dillon, A.C., see P. Gupta 176 (1991) 128

- DiMagno, T.J., see C.-K. Chan 176 (1991) 366  
Drabbels, M., see M. Ebben 176 (1991) 404  
Dugan, M.A., see L.R. Narasimhan 176 (1991) 335  
Duke, C.B., see G.K. Schenter 176 (1991) 563  
Durocher, G., see K. Sienicki 176 (1991) 322
- Ebben, M., M. Drabbels and J.J. ter Meulen, The first LIF spectrum of SiC 176 (1991) 404  
Edwards, P.P., see N.C. Pyper 176 (1991) 225  
Ellervee, A., R. Jaaniso, J. Kikas, A. Laisaar, A. Suisalu and V. Shcherbakov, Spectral hole burning at high hydrostatic pressure 176 (1991) 472  
El-Shall, M.S., see D. Wright 176 (1991) 46  
Engels, B., see P. Bündgen 176 (1991) 407  
Engleman Jr., R., see C.I. Frum 176 (1991) 504  
Ermler, W.C., see M.M. Marino 176 (1991) 36  
Ertl, G., see X.-Y. Zhu 176 (1991) 459  
Eyal, M., R. Reisfeld, V. Chernyak, Ł. Kaczmarek and A. Grabowska, Absorption, emission and lifetimes of [2,2'-bipyridyl]-3,3'-diol in sol-gel glasses and in polymethylmethacrylate 176 (1991) 531
- Fayer, M.D., see A.D. Stein 176 (1991) 159  
Fayer, M.D., see L.R. Narasimhan 176 (1991) 335  
Fayer, M.D., see K.A. Littau 176 (1991) 551  
Fei, S., see J. Tellinghuisen 176 (1991) 373  
Felker, P.M., see B.F. Henson 176 (1991) 91  
Ferrario, M., see E. Paci 176 (1991) 581  
Fleming, G.R., see C.-K. Chan 176 (1991) 366  
Fowler, P.W. and A.D. Buckingham, Central or distributed multipole moments? Electrostatic models of aromatic dimers 176 (1991) 11  
Fowler, P.W., R.W. Munn and P. Tole, Polarisability of the oxide ion in crystalline BeO 176 (1991) 439  
Fowler, P.W., see Z. Kisiel 176 (1991) 446  
Frey, J.G., see J. Cuveillier 176 (1991) 325  
Frum, C.I., R. Engleman Jr., H.G. Hedderich, P.F. Bernath, L.D. Lamb and D.R. Huffman, The infrared emission spectrum of gas-phase C<sub>60</sub> (buckminsterfullerene) 176 (1991) 504
- Garcia, E., see A. Laganà 176 (1991) 273  
Garcia, E., see A. Laganà 176 (1991) 280  
García-Solé, J., see G. Lifante 176 (1991) 482  
George, S.M., see P. Gupta 176 (1991) 128  
Georges, P., see M. Canva 176 (1991) 495  
Gervasi, O., see A. Laganà 176 (1991) 280  
Gimenez, X., see A. Laganà 176 (1991) 280  
Göhlich, H., see T.P. Martin 176 (1991) 343  
Goldman, J., see C.-Z. Lü 176 (1991) 355  
González Ureña, A., see L. Bañares 176 (1991) 178  
González Ureña, A., M. Menéndez, A. Solé Sabaté and A. Aguilar Navarro, The influence of rotational energy on the cross-section of direct reactions: comparison of a simple model with classical trajectories 176 (1991) 315

Goodman, L., see A.G. Ozkabak	176 (1991) 19
Grabowska, A., see M. Eyal	176 (1991) 531
Green, P.G., see R.E. Bumgarner	176 (1991) 123
Grunberg, P.J., see Q.-X. Xu	176 (1991) 499
Gupta, P., A.C. Dillon, P.A. Coon and S.M. George, FTIR studies reveal that silicon-containing laser-induced desorption products are surface reaction intermediates	176 (1991) 128
Haaland, P., Electronic structure of FO and its negative ions	176 (1991) 287
Haase, G., see V. Liberman	176 (1991) 379
Hackett, P.A., see B. Simard	176 (1991) 303
Hagiwara, S., see K. Kaneko	176 (1991) 75
Hall, D.G., On the calculation of single ionic activity coefficients by Kirkwood-Buff theory: comments	176 (1991) 261
Hanson, D.K., see C.-K. Chan	176 (1991) 366
Harter, W.G., see D.E. Weeks	176 (1991) 209
Hartland, G.V., see B.F. Henson	176 (1991) 91
Hasselbrink, E., see X.-Y. Zhu	176 (1991) 459
Hatano, Y., see H. Yoshida	176 (1991) 173
Hayashi, H., see M. Wakasa	176 (1991) 541
Heaven, M.C., see J. Tellinghuisen	176 (1991) 373
Hedderich, H.G., see S. Civiš	176 (1991) 489
Hedderich, H.G., see C.I. Frum	176 (1991) 504
Heitz, S., D. Weidauer and A. Hese, On the polarizabilities of centrosymmetric molecules: naphthalene as an example	176 (1991) 55
Henson, B.F., G.V. Hartland, V.A. Venturo, R.A. Hertz and P.M. Felker, Stimulated Raman spectroscopy in the $\nu_1$ region of isotopically substituted benzene dimers: evidence for symmetrically inequivalent benzene moieties	176 (1991) 91
Hertz, R.A., see B.F. Henson	176 (1991) 91
Hese, A., see S. Heitz	176 (1991) 55
Hillig II, K.W., M.S. LaBarge, A. Taleb-Bendiab and R.L. Kuczkowski, The microwave spectrum and structure of the neon-phosphorus trifluoride complex, Chem. Phys. Letters 171 (1990) 542. Erratum	176 (1991) 146
Hirokawa, J., see T. Nagata	176 (1991) 526
Huffman, D.R., see D.L. Lichtenberger	176 (1991) 203
Huffman, D.R., see C.I. Frum	176 (1991) 504
Ishii, C., see K. Kaneko	176 (1991) 75
Jaaniso, R., see A. Ellervee	176 (1991) 472
Jaffe, R.L., see D. Neuhauser	176 (1991) 546
Jamieson, M.J., Cotton-Mouton constants and electric hyperpolarizabilities for the helium isoelectronic sequence	176 (1991) 467
Jang, D.-J., see Y.B. Chung	176 (1991) 453
Jaque, F., see G. Lifante	176 (1991) 482
Jensen, P., see M.D. Marshall	176 (1991) 255
Jeung, G.-H., Chemical bonding in ScCS	176 (1991) 233
Judson, R.S., see D. Neuhauser	176 (1991) 546

- Jurgens, R. and J. Almlöf, Two very different B...N bond distances: electronic structure calculations on  $\text{BF}_3\cdots\text{NCCN}$  and  $\text{BF}_3\cdots\text{NCCH}_3$  176 (1991) 263
- Kaczmarek, Ł., see M. Eyal 176 (1991) 531
- Kampf, R.P., see M.D. Oberlander 176 (1991) 385
- Kaneko, K., K. Yamaguchi, C. Ishii, S. Ozeki, S. Hagiwara and T. Suzuki, Size evaluation of graphitic crystallites in activated carbon fibers from diamagnetic susceptibility measurements 176 (1991) 75
- Kapral, R., see X.-G. Wu 176 (1991) 242
- Kapral, R., see E. Paci 176 (1991) 581
- Kato, T., see B.H. Loo 176 (1991) 514
- Kentgens, A.P.M., C.R. Bayense, J.H.C. van Hooff, J.W. de Haan and L.J.M. van de Ven, A  $^{69}\text{Ga}$  and  $^{71}\text{Ga}$  MAS NMR study of the gallium analogue zeolite ZSM-5 176 (1991) 399
- Kikas, J., see A. Ellervee 176 (1991) 472
- Kim, D., see Y.B. Chung 176 (1991) 453
- Kim, H.S., see B.J. Min 176 (1991) 41
- Kim, H.S., see Y.B. Chung 176 (1991) 453
- Kim, K.S., see B.J. Min 176 (1991) 41
- Kisiel, Z., P.W. Fowler and A.C. Legon, Hydrogen bonding between vinylacetylene and HF: the role of steric effects in the geometry of vinylacetylene...HX complexes 176 (1991) 446
- Kitagawa, T., see Y. Mori 176 (1991) 152
- Klinowski, J., see J. Rocha 176 (1991) 395
- Kolodziejski, W., see J. Rocha 176 (1991) 395
- Kondow, T., see T. Nagata 176 (1991) 526
- Kopitz, B., see S. Deshmukh 176 (1991) 198
- Koshi, M., M. Yoshimura and H. Matsui, Photodissociation of  $\text{O}_2$  and  $\text{CO}_2$  from vibrationally excited states at high temperatures 176 (1991) 519
- Kouchi, N., see H. Yoshida 176 (1991) 173
- Kouri, D.J., see D. Neuhauser 176 (1991) 546
- Kowari, K. and B. Shizgal, The partial continuous slowing down approximation (PCSDA) in the solution of the Spencer-Fano equation 176 (1991) 575
- Koyama, Y., see E. Nishizawa 176 (1991) 390
- Kuczkowski, R.L., see K.W. Hillig II 176 (1991) 146
- Kumar, D. and S.P. McGlynn, Ionization and photoacoustically mediated optogalvanic signals 176 (1991) 536
- LaBarge, M.S., see K.W. Hillig II 176 (1991) 146
- Laganà, A., E. Garcia and J. Mateos, Parallel calculations of quasiclassical rate constants: the  $\text{H} + \text{H}_2$  reaction 176 (1991) 273
- Laganà, A., X. Gimenez, E. Garcia and O. Gervasi, Parallel calculations of approximate 3D quantum cross sections: the  $\text{Li} + \text{HF}$  reaction 176 (1991) 280
- Laisaar, A., see A. Ellervee 176 (1991) 472
- Lamb, L.D., see D.L. Lichtenberger 176 (1991) 203
- Lamb, L.D., see C.I. Frum 176 (1991) 504
- Lange, T., see T.P. Martin 176 (1991) 343
- Lee, L.C., see G. Ma 176 (1991) 141
- Lee, M., see Y.B. Chung 176 (1991) 453

- Legon, A.C., see Z. Kisiel 176 (1991) 446
- Le Saux, G., see M. Canva 176 (1991) 495
- L'Heureux, I., see X.-G. Wu 176 (1991) 242
- Liberman, V., G. Haase and R.M. Osgood Jr., Interaction of Cl<sub>2</sub> with GaAs(110) with and without laser irradiation 176 (1991) 379
- Lichtenberger, D.L., K.W. Nebesny, C.D. Ray, D.R. Huffman and L.D. Lamb, Valence and core photoelectron spectroscopy of C<sub>60</sub>, buckminsterfullerene 176 (1991) 203
- Lifante, G., F. Cussó, F. Jaque, J.A. Sanz-García, A. Monteil, B. Varrel, G. Boulon and J. Garcia-Solé, Site-selective spectroscopy of Nd<sup>3+</sup> in LiNbO<sub>3</sub>:Nd and LiNbO<sub>3</sub>:Nd,Mg crystals 176 (1991) 482
- Liou, H.T., P. Dan, H. Yang and J.-Y. Yuh, Stimulated emission pumping to the rotationally resolved state  $v = (0, 22, 0)$  of the ground electronic state of CS<sub>2</sub> by three-level polarization spectroscopy 176 (1991) 109
- Littau, K.A. and M.D. Fayer, Probing low temperature glass dynamics by fast generation and detection of optical holes 176 (1991) 551
- Liu, K., see D.M. Sonnenfroh 176 (1991) 183
- Loo, B.H., N.P. Wang, H.D. Coble and T. Kato, Raman scattering in the green phase RE<sub>2</sub>BaCuO<sub>2</sub> compounds where RE = Y, Sm, Eu, Gd, Dy, Ho, Er, Tm, Yb and Lu 176 (1991) 514
- Lü, C.-Z., J. Goldman, S. Deliwala, K.H. Chen and E. Mazur, Direct evidence for  $\nu_1$ -mode excitation in the infrared multiphoton excitation of SO<sub>2</sub> 176 (1991) 355
- Ma, G., M. Suto and L.C. Lee, NO( $\gamma$ ) emission by energy transfer from NO<sup>+</sup>(a) to NO 176 (1991) 141
- Mac, M., A. Wach and J. Najbar, Solvent effects on the fluorescence quenching of anthracene by iodide ions 176 (1991) 167
- Mackay, R.S., see Q.-X. Xu 176 (1991) 499
- Manna, B.Kr., D. Sen, S.Ch. Bera and K.K. Rohatgi-Mukherjee, Photogeneration of long-lived porphyrin cation by interaction between (meso-tetrakis(4-carboxyphenyl)porphyrin) and poly(N-vinyl-2-pyrrolidone): a spectral and flash-kinetic study 176 (1991) 191
- Marino, M.M. and W.C. Ermler, Ab initio study of the effects of cesium, hydrogen and oxygen adsorption on the work function of beryllium 176 (1991) 36
- Marshall, M.D., P. Jensen and P.R. Bunker, An ab initio close-coupling calculation of the lower vibrational energies of the HF dimer 176 (1991) 255
- Martin, T.P., T. Bergmann, H. Göhlich and T. Lange, Evidence for icosahedral shell structure in large magnesium clusters 176 (1991) 343
- Maruyama, S., see L.R. Anderson 176 (1991) 348
- Mateos, J., see A. Laganà 176 (1991) 273
- Matsui, H., see M. Koshi 176 (1991) 519
- Mazur, E., see C.-Z. Lü 176 (1991) 355
- McGlynn, S.P., see D. Kumar 176 (1991) 536
- Medina, F.D., see B.W. Baran 176 (1991) 509
- Mehring, M., see S. Zhang 176 (1991) 70
- Menéndez, M., see A. González Ureña 176 (1991) 315
- Mestdagh, J.M., see J. Cuvellier 176 (1991) 325
- Meynadier, P., see J. Cuvellier 176 (1991) 325
- Mhin, B.J., H.S. Kim, H.S. Kim, C.W. Yoon and K.S. Kim, Ab initio studies of the water hexamer: near degenerate structures 176 (1991) 41
- Michel-Beyerle, M.E. and R. Zengerle, Effect of quinone depletion on lifetime spectra in photosynthetic reaction centers 176 (1991) 85



- Miyazaki, T., Trapping site of H atoms in solid HD at 4.2 K analyzed by ESR spin-flip lines 176 (1991) 99
- Mo, G., C.C. Sung and R.H. Ritchie, Bound states of electrons in the vicinity of a dielectric sphere 176 (1991) 433
- Monteil, A., see G. Lifante 176 (1991) 482
- Mori, Y., A. Yoneda and T. Kitagawa, Multiphoton ionization of benzene at 193 nm: laser power dependence and isotope effect 176 (1991) 152
- Morishima, Y., see H. Yoshida 176 (1991) 173
- Motakabbir, K.A. and M.L. Berkowitz, Liquid-vapor interface of TIP4P water: comparison between a polarizable and a non-polarizable model 176 (1991) 61
- Munn, R.W., see P.W. Fowler 176 (1991) 439
- Nagata, T., J. Hirokawa and T. Kondow, Photodissociation of  $\text{Ar}_n^+$  cluster ions 176 (1991) 526
- Najbar, J., see M. Mac 176 (1991) 167
- Nance, S.L., see C.-K. Chan 176 (1991) 366
- Narasimhan, L.R., Y.S. Bai, M.A. Dugan and M.D. Fayer, Observation of fast time scale spectral diffusion in a low temperature glass: comparison of picosecond photon and stimulated echoes 176 (1991) 335
- Nebesny, K.W., see D.L. Lichtenberger 176 (1991) 203
- Neuhauser, D., R.S. Judson, R.L. Jaffe, M. Baer and D.J. Kouri, Total integral reactive cross sections for  $\text{F} + \text{H}_2 \rightarrow \text{HF} + \text{H}$ : comparison of converged quantum, quasiclassical trajectory and experimental results 176 (1991) 546
- Nicolaides, C.A. and P. Valtazanos, Chemical trapping of molecular hydrogen by BeO 176 (1991) 239
- Nishimura, Y., see H. Sekiya 176 (1991) 477
- Nishizawa, E. and Y. Koyama, A coordination-marker Raman line of bacteriochlorophyll a in the  $\text{T}_1$  state 176 (1991) 390
- Norris, J.R., see C.-K. Chan 176 (1991) 366
- Novicki, S.W. and R. Vasudev, Photodissociation of HONO at 218 nm: motional anisotropy of the OH fragment 176 (1991) 118
- Oberlander, M.D., R.P. Kampf and J.M. Parson, Chemiluminescent reactions of Ca with hydrogen peroxide 176 (1991) 385
- Osgood Jr., R.M., see V. Liberman 176 (1991) 379
- Ozeki, S., see K. Kaneko 176 (1991) 75
- Ozkabak, A.G. and L. Goodman, Skeletal flexing during methyl rotation in small dimethyl molecules 176 (1991) 19
- Paci, E., G. Ciccotti, M. Ferrario and R. Kapral, Activation energies by molecular dynamics with constraints 176 (1991) 581
- Parasuk, V., J. Almlöf and B. DeLeeuw, Basis-set superposition errors in tightly bound systems 176 (1991) 1
- Parson, J.M., see M.D. Oberlander 176 (1991) 385
- Penner, A., A. Amirav and R. Bersohn, Emission spectrum of  $\text{CdCH}_3$  176 (1991) 147
- Peyerimhoff, S.D., see P. Bündgen 176 (1991) 407
- Potts, A.R., see T.J. Wallington 176 (1991) 103
- Pyper, N.C. and P.P. Edwards, The characteristic electronic structure needed for high-temperature superconductivity 176 (1991) 225



Quesada, M.A., see Q.-X. Xu	176 (1991) 499
Ramasesha, S., see I.D.L. Albert	176 (1991) 217
Ray, C.D., see D.L. Lichtenberger	176 (1991) 203
Reisfeld, R., see M. Eyal	176 (1991) 531
Richert, R., see A. Wagener	176 (1991) 329
Ritchie, R.H., see G. Mo	176 (1991) 433
Rocha, J., W. Kołodziejski and J. Klinowski, Two-dimensional J-resolved $^{13}\text{C}$ NMR of a solid with restricted molecular motion	176 (1991) 395
Rohatgi-Mukherjee, K.K., see B.Kr. Manna	176 (1991) 191
Rudakoff, G., see J. Sonnefeld	176 (1991) 309
Sadlej, A.J. and M. Urban, Mutual dependence of relativistic and electron correlation contributions to molecular properties: the dipole moment of AgH	176 (1991) 293
Sakaguchi, H., see K. Urabe	176 (1991) 361
Sakaguchi, Y., see M. Wakasa	176 (1991) 541
Sanz-García, J.A., see G. Lifante	176 (1991) 482
Schenter, G.K. and C.B. Duke, Theory of photoinduced twisting dynamics in polar solvents: application to dimethylaminobenzonitrile in propanol at low temperatures	176 (1991) 563
Schiffer, M., see C.-K. Chan	176 (1991) 366
Scuseria, G.E., The open-shell restricted Hartree-Fock singles and doubles coupled cluster method including triple excitations CCSD(T): application to $\text{C}_3^+$	176 (1991) 27
Scuseria, G.E., Ab initio theoretical predictions of the equilibrium geometries of $\text{C}_{60}$ , $\text{C}_{60}\text{H}_{60}$ and $\text{C}_{60}\text{F}_{60}$	176 (1991) 423
Sekiya, H., Y. Nishimura and M. Tsuji, New electronic emission from $\text{SiCl}_2$	176 (1991) 477
Sen, D., see B.Kr. Manna	176 (1991) 191
Shcherbakov, V., see A. Ellervee	176 (1991) 472
Shen, H., see A.D. Bandrauk	176 (1991) 428
Shinsaka, K., see H. Yoshida	176 (1991) 173
Shizgal, B., see K. Kowari	176 (1991) 575
Sienicki, K. and G. Durocher, On the kinetics of photoelectron transfer in solid solution	176 (1991) 322
Simard, B., M. Vasseur and P.A. Hackett, The permanent dipole moment of ScF	176 (1991) 303
Smalley, R.E., see L.R. Anderson	176 (1991) 348
Solé Sabaté, A., see A. González Ureña	176 (1991) 315
Sonnefeld, J., W. Vogelsberger and G. Rudakoff, Thermodynamic considerations on the contribution of the dissociation of silanol groups to the stability of silica sols	176 (1991) 309
Sonnenfroh, D.M. and K. Liu, Number density-to-flux transformation revisited: kinematic effects in the use of laser-induced fluorescence for scattering experiments	176 (1991) 183
Srivastava, S. and Vishwamittar, Renormalised hypervirial-Padé calculation of energies for $V(x) = m(\frac{1}{2}\omega^2x^2 + \frac{1}{3}\alpha x^3 + \frac{1}{4}\beta x^4)$	176 (1991) 266
Stein, A.D. and M.D. Fayer, Nanosecond timescale optical inhomogeneous broadening of dye molecules in liquids at and near room temperature	176 (1991) 159
Stockman, P.A., see R.E. Bumgarner	176 (1991) 123
Sublemonnier, O., see J. Cuvellier	176 (1991) 325
Suisalu, A., see A. Ellervee	176 (1991) 472
Sung, C.C., see G. Mo	176 (1991) 433
Suto, M., see G. Ma	176 (1991) 141

Suzuki, S., see R.E. Bumgarner	176 (1991) 123
Suzuki, T., see K. Kaneko	176 (1991) 75
Taleb-Bendiab, A., see K.W. Hillig II	176 (1991) 146
Tellinghuisen, J., S. Fei, X. Zheng and M.C. Heaven, Observation and analysis of the D' ← A' transition of I <sub>2</sub> in a free-jet expansion	176 (1991) 373
Terazima, M. and T. Azumi, The relation between triplet lifetime and photoacoustic waveform detected by probe beam deflection	176 (1991) 79
Ter Meulen, J.J., see M. Ebben	176 (1991) 404
Tole, P., see P.W. Fowler	176 (1991) 439
Tsuji, M., see H. Sekiya	176 (1991) 477
Ukai, M., see H. Yoshida	176 (1991) 173
Urabe, K. and H. Sakaguchi, Electric current induced self-sustained oscillation of electric potential across a membrane filter impregnated with triolein	176 (1991) 361
Urban, M., see A.J. Sadlej	176 (1991) 293
Valtazanos, P., see C.A. Nicolaides	176 (1991) 239
Van de Ven, L.J.M., see A.P.M. Kentgens	176 (1991) 399
Van Hooff, J.H.C., see A.P.M. Kentgens	176 (1991) 399
Varrel, B., see G. Lifante	176 (1991) 482
Vasseur, M., see B. Simard	176 (1991) 303
Vasudev, R., see S.W. Novicki	176 (1991) 118
Vekhter, B.G., Possible channel of carrier pairing around Jahn-Teller center	176 (1991) 67
Venturo, V.A., see B.F. Henson	176 (1991) 91
Vishwamittar, see S. Srivastava	176 (1991) 266
Visticot, J.P., see J. Cuvellier	176 (1991) 325
Vogelsberger, W., see J. Sonnefeld	176 (1991) 309
Wach, A., see M. Mac	176 (1991) 167
Wagener, A. and R. Richert, Solvation dynamics versus inhomogeneity of decay rates as the origin of spectral shifts in supercooled liquids	176 (1991) 329
Wakasa, M., Y. Sakaguchi and H. Hayashi, Magnetic field effects on the dynamic behavior of a radical pair involving a germyl radical	176 (1991) 541
Wallington, T.J., J.M. Andino, A.R. Potts and P.H. Wine, A competitive kinetics study of the reaction of Cl with CS <sub>2</sub> in air at 298 K	176 (1991) 103
Wang, N.P., see B.H. Loo	176 (1991) 514
Weeks, D.E. and W.G. Harter, Rotation-vibration scalar coupling $\zeta$ coefficients and spectroscopic band shapes of buckminsterfullerene	176 (1991) 209
Weidauer, D., see S. Heitz	176 (1991) 55
White, J.M., see X.-Y. Zhu	176 (1991) 459
Wine, P.H., see T.J. Wallington	176 (1991) 103
Wolf, M., see X.-Y. Zhu	176 (1991) 459
Wright, D., R. Caidwell and M.S. El-Shall, Vapor phase homogeneous nucleation of acetonitrile: the effect of dipole-dipole interaction	176 (1991) 46
Wu, X.-G., I. L'Heureux and R. Kapral, Projected dynamics for BGK reaction kinetics	176 (1991) 242

Xu, Q.-X., R.S. Mackay, F.J. Aoiz, M.A. Quesada, P.J. Grunberg and R.B. Bernstein, Measurement of the translational energy dependence of the cross section for the reaction of $\text{Sr} + \text{CH}_3\text{I} \rightarrow \text{SrI} + \text{CH}_3$ from 0.1–1.0 eV	176 (1991) 499
Yamaguchi, K., see K. Kaneko	176 (1991) 75
Yang, H., see H.T. Liou	176 (1991) 109
Yoneda, A., see Y. Mori	176 (1991) 152
Yoon, C.W., see B.J. Mhin	176 (1991) 41
Yoshida, H., Y. Morishima, M. Ukai, K. Shinsaka, N. Kouchi and Y. Hatano, Cross sections for deexcitation of $\text{He}(2^3\text{S}, 2^1\text{S} \text{ and } 2^1\text{P})$ by $\text{SiH}_4$ and $\text{GeH}_4$	176 (1991) 173
Yoshimura, M., see M. Koshi	176 (1991) 519
Yuh, J.-Y., see H.T. Liou	176 (1991) 109
Zengerle, R., see M.E. Michel-Beyerle	176 (1991) 85
Zerbetto, F. and M.Z. Zgierski, The $\text{T}_1$ and $\text{T}_2$ planar structures of butadiene	176 (1991) 7
Zgierski, M.Z., see F. Zerbetto	176 (1991) 7
Zhang, S. and M. Mehring, A method of resolving superposed homogeneously broadened NMR lines of different $T_2$	176 (1991) 70
Zheng, X., see J. Tellinghuisen	176 (1991) 373
Zhu, X.-Y., J.M. White, M. Wolf, E. Hasselbrink and G. Ertl, Polarization probe of excitation mechanisms in surface photochemistry	176 (1991) 459